



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R04-OAR-2014-0006; FRL-9907-10-Region-3]

Approval and Promulgation of Implementation Plans; Virginia; Regional Haze Five-Year Progress Report State Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing approval of a revision to the Virginia State Implementation Plan (SIP) submitted by the Commonwealth of Virginia through the Virginia Department of Environmental Quality (DEQ). Virginia's SIP revision addresses requirements of the Clean Air Act (CAA) and EPA's rules that require states to submit periodic reports describing progress towards reasonable progress goals (RPGs) established for regional haze and a determination of the adequacy of the Commonwealth's existing SIP addressing regional haze (regional haze SIP). EPA is proposing approval of Virginia's SIP revision on the basis that it addresses the progress report and adequacy determination requirements for the first implementation period for regional haze.

DATE: Comments must be received on or before [insert 30 days from the date of publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID Number EPA-R03-OAR-2014-0006, by one of the following methods:

- A. www.regulations.gov. Follow the on-line instructions for submitting comments.
- B. E-mail: fernandez.cristina@epa.gov.
- C. Mail: EPA-R03-OAR-2014-0006, Cristina Fernandez, Associate Director, Office of Air Program Planning, Mailcode 3AP30, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103.
- D. Hand Delivery: At the previously-listed EPA Region III address. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-R03-OAR-2014-0006. EPA's policy is that all comments received will be included in the public docket without change, and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you

submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the electronic docket are listed in the www.regulations.gov index.

Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form.

Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of Virginia's submittal are available at the Virginia Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.

FOR FURTHER INFORMATION CONTACT: Irene Shandruk, (215) 814-2166, or by e-mail at shandruk.irene@epa.gov.

SUPPLEMENTARY INFORMATION:

Table of Contents

I. Background

II. Requirements for the Regional Haze Progress Report SIPs and Adequacy

Determinations

III. EPA's Analysis of Virginia's Regional Haze Progress Report SIP and Adequacy

Determination

IV. General Information Pertaining to SIP Submittals from the Commonwealth of Virginia

V. EPA's Proposed Action

VI. Statutory and Executive Order Reviews

I. Background

States are required to submit a progress report in the form of a SIP revision every five years that evaluates progress towards the RPGs for each mandatory Class I Federal area within the state and in each mandatory Class I Federal area outside the state which may be affected by emissions from within the state. *See* 40 CFR 51.308(g). States are also required to submit, at the same time as the progress report, a determination of the adequacy of the state's existing regional haze SIP. *See* 40 CFR 51.308(h). The first progress report SIP is due five years after submittal of the initial regional haze SIP. On October 4, 2010, Virginia DEQ submitted the Commonwealth's first regional haze SIP in accordance with the requirements of 40 CFR 51.308.¹

¹ On June 13, 2012, EPA finalized a limited approval of Virginia's October 4, 2010 regional haze SIP to address the first implementation period for regional haze (77 FR 35287). In a separate action, published on June 7, 2012 (77 FR

On November 8, 2013, the Commonwealth of Virginia submitted, as a SIP revision (progress report SIP), a report on progress made in the first implementation period towards RPGs for Class I areas in the Commonwealth and Class I areas outside the Commonwealth that are affected by emissions from Virginia's sources. This progress report SIP and accompanying cover letter also included a determination that the Commonwealth's existing regional haze SIP requires no substantive revision to achieve the established regional haze visibility improvement and emissions reduction goals for 2018. EPA is proposing to approve Virginia's progress report SIP on the basis that it satisfies the requirements of 40 CFR 51.308(g) and 51.308(h).

II. Requirements for the Regional Haze Progress Report SIPs and Adequacy

Determinations

Under 40 CFR 51.308(g), states must submit a regional haze progress report as a SIP revision every five years and must address, at a minimum, the seven elements found in 40 CFR 51.308(g). As described in further detail in section III of this rulemaking action, 40 CFR 51.308(g) requires: (1) A description of the status of measures in the approved regional haze SIP; (2) a summary of emissions reductions achieved; (3) an assessment of visibility conditions

33642), EPA finalized a limited disapproval of the Virginia regional haze SIP because of the Commonwealth's reliance on the Clean Air Interstate Rule (CAIR) to meet certain regional haze requirements, which EPA replaced in August 2011 with the Cross-State Air Pollution Rule (CSAPR) (76 FR 48208, August 8, 2011). In the aforementioned June 7, 2012 action, EPA finalized a Federal Implementation Plan (FIP) for Virginia to replace the Commonwealth's reliance on CAIR with reliance on CSAPR. Following these EPA actions, the D.C. Circuit issued a decision in *EME Homer City Generation, L.P. v. EPA*, 696 F.3d 7 (D.C. Cir. 2012), *cert. granted* 133 U.S. 2857 (2013) vacating CSAPR and keeping CAIR in place pending the promulgation of a valid replacement rule. EPA believes that the *EME Homer City* decision impacts the reasoning that formed the basis for EPA's limited disapproval of Virginia's regional haze SIP based on Virginia's reliance upon CAIR and expects to propose an appropriate action regarding the limited approval and limited disapproval of the regional haze SIP upon final resolution of *EME Homer City*.

for each Class I area in the state; (4) an analysis of changes in emissions from sources and activities within the state; (5) an assessment of any significant changes in anthropogenic emissions within or outside the state that have limited or impeded progress in Class I areas impacted by the state's sources; (6) an assessment of the sufficiency of the approved regional haze SIP; and (7) a review of the state's visibility monitoring strategy.

Under 40 CFR 51.308(h), states are required to submit, at the same time as the progress report SIP, a determination of the adequacy of their existing regional haze SIP and to take one of four possible actions based on information in the progress report. As described in further detail in section III of this rulemaking action, 40 CFR 51.308(h) requires states to either: (1) Submit a negative declaration to EPA that no further substantive revision to the state's existing regional haze SIP is needed; (2) provide notification to EPA (and other state(s) that participated in the regional planning process) if the state determines that its existing regional haze SIP is or may be inadequate to ensure reasonable progress at one or more Class I areas due to emissions from sources in other state(s) that participated in the regional planning process, and collaborate with these other state(s) to develop additional strategies to address deficiencies; (3) provide notification with supporting information to EPA if the state determines that its existing regional haze SIP is or may be inadequate to ensure reasonable progress at one or more Class I areas due to emissions from sources in another country; or (4) revise its regional haze SIP to address deficiencies within one year if the state determines that its existing regional haze SIP is or may

be inadequate to ensure reasonable progress in one or more Class I areas due to emissions from sources within the state.

III. EPA's Analysis of Virginia's Regional Haze Progress Report and Adequacy

Determination

On November 8, 2013, Virginia submitted a SIP revision to address progress made towards RPGs of Class I areas in the Commonwealth and Class I areas outside the Commonwealth that are affected by emissions from Virginia's sources. This progress report SIP also includes a determination of the adequacy of the Commonwealth's existing regional haze SIP.

Virginia has two Class I areas within its borders: James River Face Wilderness Area (James River) and Shenandoah National Park (Shenandoah). Virginia mentions in the progress report SIP that Virginia sources were also identified, through an area of influence modeling analysis based on back trajectories, as potentially impacting nine Class I areas in five neighboring states: Dolly Sods Wilderness Area in West Virginia; Great Smoky Mountains National Park and Joyce Kilmer - Slickrock Wilderness Area in North Carolina and Tennessee; Linville Gorge, Shining Rock and Swanquarter Wilderness Areas in North Carolina; Cohutta and Wolf Island Wilderness Areas in Georgia; and Cape Romaine Wilderness Area in South Carolina.

A. Regional Haze Progress Report SIPs

This section summarizes each of the seven elements that must be addressed by the progress report under the provisions of 40 CFR 51.308(g); how Virginia's progress report SIP addressed

each element; and EPA's analysis and proposed determination as to whether the Commonwealth satisfied each element.

The provisions under 40 CFR 51.308(g)(1) require a description of the status of implementation of all measures included in the regional haze SIP for achieving RPGs for Class I areas both within and outside the state. The Commonwealth of Virginia evaluated the status of all measures included in its 2010 regional haze SIP in accordance with the requirements under 40 CFR 51.308(g)(1). Specifically, in its progress report SIP, Virginia summarizes the status of the emissions reduction measures that were included in the final iteration of the Visibility Improvement - State and Tribal Association of the Southeast (VISTAS) regional haze emissions inventory and RPG modeling. The Commonwealth also discusses the status of those measures that were not included in the final VISTAS emissions inventory and were not relied upon in the initial regional haze SIP to meet RPGs. The Commonwealth notes that the emissions reductions from these measures, which are relied upon by Virginia for reasonable progress, will help ensure Class I areas impacted by Virginia sources achieve their RPGs. The measures include applicable Federal programs (e.g., mobile source rules, Maximum Achievable Control Technology (MACT) standards, Federal and state consent agreements, and Federal and state control strategies for electric generating units (EGUs) such as CAIR, CSAPR, and state multi-pollutant regulations for EGUs). Virginia's summary includes a discussion of the benefits associated with each measure and quantifies those benefits wherever possible. In instances where implementation of a measure

did not occur on schedule, information is provided on the source category and the measure's relative impact on the overall future year emissions inventories. The progress report SIP also discusses the status and implementation of the best available retrofit technology (BART) determinations for BART sources in Virginia, the implementation status of BART for sources in neighboring states, and the implementation of a reasonable progress determination for one Virginia source. Finally, Virginia's progress report SIP discusses implementation of regulations and requirements developed after Virginia's regional haze SIP was prepared which Virginia asserts will provide extra assurance that Virginia's Class I areas will meet their RPGs including the Mercury and Air Toxics Standard (MATS) for EGUs, the 2010 sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS), several control measures for volatile organic compound (VOC) reductions, Federal consent decrees which include SO₂ and nitrogen oxide (NO_x) reductions at sources, and plant shutdowns.

In aggregate, as noted later in section III.A of this rulemaking action, the emissions reductions from the identified measures are expected to exceed significantly the original projections in Virginia's regional haze SIP and result in lower emissions by 2018 than originally projected. Virginia states that it did not expect reasonable progress to be adversely impacted in any of the Class I areas in Virginia or neighboring states by any of the changes to the emissions reductions projected.

EPA proposes to find that Virginia's analysis adequately addresses the provisions under 40 CFR 51.308(g)(1). The Commonwealth documents the implementation status of measures from its

regional haze SIP such as regulations, Federal and state consent decrees, and BART determinations in addition to describing additional measures that came into effect since the VISTAS analysis for the Virginia regional haze SIP was completed, including new regulations for EGUs, Federal consent decrees, and unanticipated plant shutdowns. Virginia's progress report also describes significant measures resulting from EPA regulations other than the regional haze program as they pertain to Virginia sources. The progress report SIP highlights the effect of several Federal control measures both nationally and in the VISTAS region, and when possible, in Virginia.

The Commonwealth's progress report discusses the status of key control measures that the Commonwealth relied upon in the first implementation period to make reasonable progress. In its regional haze SIP, Virginia identified SO₂ emissions from coal-fired EGUs as a key contributor to regional haze in the VISTAS region and identified the EGU sector as a major contributor to visibility impairment at all Class I areas in the VISTAS region. The Commonwealth's progress report SIP provides additional information on EGU control strategies and the status of existing and future expected controls for Virginia's EGUs, with updated actual SO₂ emissions data for the years 2002 – 2012 reflecting large reductions of SO₂ through 2012. In its regional haze SIP, Virginia had determined that no additional controls of non-EGU sources were reasonable for the first implementation period.

Regarding the status of BART and reasonable progress control requirements for sources in the Commonwealth, EPA finds Virginia's progress report SIP adequately reviews the status of the Commonwealth's four BART sources and its reasonable progress determination source by mentioning that controls are currently operational at these sources or that units have been shutdown.² Because the Commonwealth found no additional controls to be reasonable for the first implementation period for sources evaluated for reasonable progress in Virginia, no further discussion of the status of controls was necessary in the progress report SIP. EPA proposes to conclude that Virginia has adequately addressed the status of control measures in its regional haze SIP as required by the provisions under 40 CFR 51.308(g)(1) by discussing the status of key measures that the Commonwealth relied upon in the first implementation period to make reasonable progress.

The provisions under 40 CFR 51.308(g)(2) require a summary of the emissions reductions achieved in the state through the measures subject to the requirements under 40 CFR 51.308(g)(1). In its regional haze SIP and progress report SIP, Virginia focused its assessment on the largest contributor to visibility impairment, SO₂ emissions from EGUs. Virginia made this decision for the first implementation period due to VISTAS' findings that sulfate accounted for more than 70 percent of visibility-impairing pollution in the Southeast and that SO₂ point source emissions in 2018 represent more than 95 percent of the total projected SO₂ emissions

² Virginia also identified 66 BART-subject sources in other states determined to be in the area of influence of either James River or Shenandoah using the Commonwealth's methodology for determining sources eligible for a reasonable progress control determination. EPA finds the progress report SIP adequately summarizes the BART control determinations and their implementation for these facilities in the surrounding States of Maryland, Pennsylvania, Kentucky, Delaware, West Virginia, Tennessee, and North Carolina.

inventory.

Overall, Virginia states SO₂ emissions have decreased significantly in the Commonwealth. Virginia states there has been a large reduction in SO₂ emissions from EGUs, an 87 percent decrease from 2002 to 2012, which resulted from many process and operational changes, including SO₂ control installations, switches to cleaner fuels by emission units, retirements of units, and curtailments of certain coal-fired operations. Based on utility emissions data from 2002 through 2012 as reported in EPA's Clean Air Markets Division (CAMD) database, Virginia indicates that actual emissions of SO₂ from the coal-fired EGU sector have dropped from 216,341 tons per year (tpy) in 2002 to 28,345 tpy in 2012, reflecting the 87 percent decrease.³ Additionally, the 2012 actual emissions of SO₂ (30,732 tpy) are substantially less than originally projected in the 2018 modeling inventory (82,121 tpy).

While heat input to Virginia's EGUs has decreased approximately 27 percent from 2002 values, Virginia states in its progress report SIP that SO₂ and NO_x emission rates for the coal-fired EGUs have decreased by 82 percent for SO₂ and 67 percent for NO_x due to installation of controls and fuel switches. Given these substantial reductions in emission rates, Virginia states it expects the significant reductions of SO₂ should be maintained even if heat inputs increase in the

³ In comparing 2002 and 2012 emissions to report the 87 percent decrease in SO₂ emissions from the EGU sector, Virginia excluded SO₂ emissions from EGU sources which did not report to CAMD in 2002 from the 2012 SO₂ emissions of 28,345 tpy. The complete SO₂ emissions from all Virginia EGUs reporting to CAMD in 2012 is 30,732 tpy.

future. Virginia states that similar progress in emissions reductions across all VISTAS states have been observed between 2002 and 2012 as well. Based on EPA's CAMD data, 2012 heat input data decreased only 8 percent from 2002 values, while SO₂ and NO_x emission rates declined 76 percent and 73 percent respectively. Virginia also states in its progress report SIP that it expects additional retirements of EGU sources through 2018 and asserts the remaining coal-fired EGUs in Virginia have operational SO₂ controls which should greatly reduce the visibility impact of such sources on Class I areas.

EPA proposes to conclude that Virginia has adequately addressed the requirements under 40 CFR 51.308(g)(2) with its summary of the large emissions reductions, particularly in SO₂ and NO_x from EGUs, achieved in the Commonwealth through the measures in Virginia's regional haze SIP. The Commonwealth provides estimates, and where available, actual emissions reductions of SO₂ (and NO_x) from EGUs in Virginia that have occurred since the Commonwealth submitted its regional haze SIP. The Commonwealth appropriately focused on SO₂ emissions from its EGUs in its progress report SIP because Virginia had previously identified these emissions as the most significant contributors to visibility impairment at James River and Shenandoah and at additional Class I areas that Virginia sources impact. In addition, Virginia provides estimates, and where available, actual emissions reductions for certain non-EGU control measures that were in its regional haze SIP when addressing the requirements under 40 CFR 51.308(g)(1) for implementation status. Because no additional controls were found to be reasonable for the first implementation period for evaluated sources in Virginia for reasonable

progress, EPA proposes to find that no further discussion of emissions reductions from controls was necessary in the progress report SIP.

The provisions under 40 CFR 51.308(g)(3) require that states with Class I areas provide the following information for the most impaired and least impaired days for each area, with values expressed in terms of five-year averages of these annual values:⁴ (1) Current visibility conditions; (2) the difference between current visibility conditions and baseline visibility conditions; and (3) the change in visibility impairment over the past five years.

The Commonwealth provides visibility data for 2001 through 2011 that addresses the three requirements of 40 CFR 51.308(g)(3) for James River and Shenandoah. In the Virginia regional haze SIP, for the 20% worst days, Virginia established a RPG for James River of 6.7 deciview (dv) reduction in visibility impairment by 2018, which is significantly greater than the 4.2 dv reduction required to meet the uniform rate of progress necessary to achieve a natural background condition of 11.1 dv by 2064. For Shenandoah, Virginia established a RPG for the 20% worst days of 7.4 dv reduction in visibility impairment by 2018, which is significantly greater than the 4.2 dv reduction required to meet the uniform rate of progress necessary to achieve the natural background condition of 11.4 dv by 2064. Likewise, Virginia also adopted a RPG for the 20% best days that would result in a 2.2 dv reduction in visibility impairment for

⁴ The “most impaired days” and “least impaired days” in the regional haze rule refers to the average visibility impairment (measured in deciviews) for the twenty percent of monitored days in a calendar year with the highest and lowest amount of visibility impairment, respectively, averaged over a five-year period. *See* 40 CFR 51.301.

James River and 1.8 dv reduction in visibility impairment for Shenandoah. Based on Virginia's analysis of emissions reductions and visibility data for 2001-2011, Virginia states it is on track to achieve its RPGs by 2018, visibility is improving at James River and Shenandoah, and no additional controls on non-EGUs are needed as SO₂ emission reductions from EGUs are expected to continue over the next five years.

EPA finds the difference between current and baseline visibility and the five-year rolling averages for the most impaired (20% worst) and least impaired (20% best) days at both Virginia Class I areas indicates that visibility has significantly improved since 2001 (as illustrated in Table 1 of this rulemaking action) and finds Virginia's assessment that it is on track to meet its RPGs at James River and Shenandoah reasonable given the downward trend in visibility impairment and in SO₂ emissions from EGUs.

Table 1. Visibility Data for Virginia Class I Areas

Year	James River Face Wilderness Area				Shenandoah National Park			
	20% Worst Days		20% Best Days		20% Worst Days		20% Best Days	
	Annual	5-Year Average	Annual	5-Year Average	Annual	5-Year Average	Annual	5-Year Average
2001	29.5	--	14.5	--	29.2	--	13.2	--
2002	30.4	--	15.7	--	30.5	--	11.5	--
2003	28.4	--	12.9	--	28.9	--	9.5	--
2004	28.2	--	13.8	--	29.3	--	9.4	--
2005	30.5	29.4	14.9	14.4	30.8	29.8	10.2	10.8
2006	29.0	29.3	14.8	14.4	29.3	29.8	10.6	10.3
2007	28.5	28.9	13.8	14.0	28.8	29.4	11.1	10.2
2008	25.5	28.4	13.0	14.1	25.7	28.8	8.2	10.0
2009	22.9	27.3	11.6	13.6	21.8	27.3	8.2	9.7
2010	23.9	26.0	13.4	13.3	23.4	25.8	9.7	9.6
2011	24.3	24.4	11.5	12.7	23.4	24.6	7.8	9.0

EPA finds Virginia provided the required information regarding visibility conditions and

changes to meet the requirements under 40 CFR 51.308(g)(3), specifically providing current conditions based on the latest available Interagency Monitoring of Protected Visual Environments (IMPROVE) monitoring data, the difference between current visibility conditions and baseline visibility conditions (2001-2004), and the change in visibility impairment over the most recent five-year period (2007-2011) for which data were available at the time of the progress report SIP development. For the 2007-2011 time period for James River, visibility impairment for the 20-percent worst days improved by 4.5 dv (comparing 5 year averages) and for the 20-percent best days improved by 1.3 dv (comparing 5 year averages). For the 2007-2011 time period for Shenandoah, visibility impairment for the 20-percent worst days improved by 4.8 dv (comparing 5 year averages) and for the 20-percent best days improved by 1.2 dv (comparing 5 year averages). Given the visibility improvement in Virginia's Class I areas, EPA finds that the Commonwealth's assessment that it is on track to meet RPGs by 2018 is reasonable. EPA proposes to conclude that Virginia has adequately addressed 40 CFR 51.308(g)(3).

The provisions under 40 CFR 51.308(g)(4) require an analysis tracking emissions changes of visibility-impairing pollutants from the state's sources by type or category over the past five years based on the most recent updated emissions inventory. In its progress report SIP, Virginia presents emissions inventories for 2002, 2007, 2009, 2011, and 2018 in accordance with the requirements of 40 CFR 51.308(g)(4). The progress report SIP includes Virginia's baseline

emissions inventory from 2002 and estimated emissions inventories for 2009 and 2018 (as updated by VISTAS in 2008).⁵ Virginia's progress report SIP includes the 2007 emissions inventory prepared by the Southeastern Modeling, Analysis, and Planning (SEMAP) project, which was funded by EPA and the ten states in VISTAS and which is the most recent historical inventory that has been fully quality-assured according to Virginia.⁶ Virginia then compares emissions from 2002 and 2007 to its 2011 emissions inventory which was prepared from 2011 National Emissions Inventory, version 1 (NEIv1) data and available state-level information.⁷

The pollutants inventoried include carbon monoxide (CO), VOCs, NO_x, fine particulate matter (PM_{2.5}), coarse particulate matter (PM₁₀), ammonia (NH₃), and SO₂. The emissions inventories include the following source classifications: Stationary point and area sources, off-road and on-road mobile sources, and biogenic sources. The comparison of emissions inventory data shows that emissions of the key visibility-impairing pollutant for the southeast, SO₂, continued to drop from 428,070 tpy in 2002 to 268,877 tpy in 2007 to 115,436 tpy in 2011. The emissions inventories also show similar substantial declines in other pollutants, including CO, NO_x, PM₁₀,

⁵ VISTAS improved model performance for the 2002 base year emissions inventory used by Virginia in its original regional haze SIP, resulting in updates to the 2002 inventory and the 2009 and 2018 projection inventories. VISTAS provided the final iteration of these inventories to the states in 2008.

⁶ Pursuant to 40 CFR 51.308(b), regional haze SIPs for the first implementation period were due on December 17, 2007. Therefore, EPA finds that the 2007 emissions inventory used by Virginia in this progress report SIP reflects an appropriate emissions inventory for Virginia to use for 40 CFR 51.308(g)(4) to track emissions changes of visibility-impairing pollutants from the state's sources.

⁷ The 2011 NEI inventory uses state-supplied data or model inputs for area and non-road estimates. The 2011 on-road estimates are based on Virginia's application of EPA's Motor Vehicle Emission Simulator (MOVES) model using both county-specific inputs for all Virginia jurisdictions and the model's inventory mode. The 2011 point source data is based on 2011 CAMD data for those sources reporting to CAMD or on data from Virginia's Comprehensive Environmental Data System (CEDS).

and VOCs between 2007 and 2011.⁸ Finally, the 2011 emissions inventory shows emissions levels of SO₂, CO, NH₃, PM₁₀, PM_{2.5}, and VOCs well below levels projected for 2018. For meeting the requirements under 40 CFR 51.308(g)(2), Virginia documented substantial emissions reductions in SO₂ and NO_x from EGUs that already have occurred and discussed further emissions expected by 2018 for this sector. As noted in section III.A of this rulemaking action, Virginia expects overall EGU SO₂ emissions to continue to decline beyond the reductions projected in the Commonwealth's regional haze SIP due the retirement of many coal-fired power plants and additional fuel switches not previously projected which should result in further visibility improvement at Class I areas affected by Virginia sources.

EPA proposes to conclude that Virginia has adequately addressed the requirements under 40 CFR 51.308(g)(4). While ideally the five-year period to be analyzed for emissions inventory changes is the time period since the current regional haze SIP was submitted, availability of quality-assured data may not always correspond with this period. Therefore, EPA believes that there is some flexibility in the five-year time period states can select for tracking emissions changes to meet this requirement. EPA proposes to find Virginia appropriately compared its 2011 emissions inventory with the 2007 emissions inventory.⁹ Virginia also included more

⁸ EPA notes that emissions of PM_{2.5} remained relatively stable in Virginia between 2007 and 2011; however, significant reductions in emissions of PM_{2.5} occurred from 2002 (85,762 tpy) to 2011 (72,441 tpy), and the 2011 emissions of PM_{2.5} are still well below the 2018 projections of 93,895 tpy of PM_{2.5} demonstrating Virginia's progress in reductions of PM_{2.5}.

⁹ As stated above, Virginia's 2007 emissions inventory reflects emissions in the year the first regional haze SIP was due per 40 CFR 51.308(b), and EPA finds the 2007 inventory to be an appropriate emissions inventory for Virginia to use for 40 CFR

recent SO₂ and NO_x emissions data from 2012 for the EGU sector which shows continuing declining trends in emissions of these pollutants. EPA also reviewed preliminary SO₂ and NO_x emissions data from CAMD for Virginia's EGUs for 2013 and notes similar significantly reduced emissions from these EGU sources in 2013. EPA believes that Virginia presented an adequate analysis tracking emissions trends for visibility impairing pollutants such as SO₂, NO_x, PM₁₀ and PM_{2.5} since 2007 using the emissions data available to Virginia. Virginia's 2011 emissions inventory shows significant reductions of 153,441 tpy of SO₂, 92,081 tpy of NO_x, and 16,373 tpy of PM₁₀ from 2007 with even larger reductions when compared to 2002 and well beyond what was projected for 2018, demonstrating greater progress than Virginia had projected in 2010. EPA believes this provides sufficient information to support the representativeness of the period evaluated by Virginia.

The provisions under 40 CFR 51.308(g)(5) require an assessment of any significant changes in anthropogenic emissions within or outside the state that have occurred over the past five years that have limited or impeded progress in reducing pollutant emissions and improving visibility in Class I areas impacted by the state's sources. In its progress report SIP, Virginia states that sulfates continue to be the biggest single contributor to regional haze at James River and Shenandoah. Accordingly, Virginia focused its analysis on addressing large SO₂ emissions from point sources but has also addressed in its analysis NO_x and PM_{2.5}. In its progress report SIP, Virginia demonstrates that the Commonwealth's reduced emissions in 2012 have already exceeded Virginia's 2018 emissions inventory projections for SO₂, NO_x, and PM_{2.5} particularly

51.308(g)(4) to track emissions changes of visibility-impairing pollutants.

for the EGU sector and discusses further emissions reductions expected from additional state and Federal measures not included in the regional haze SIP such as MATS, the 2010 SO₂ NAAQS, Federal consent decrees with SO₂ and NO_x reductions at sources, and plant shutdowns.

EPA proposes to find that Virginia has adequately addressed the provisions under 40 CFR 51.308(g)(5). The Commonwealth adequately demonstrated that there are no significant changes in emissions of SO₂, PM_{2.5}, or NO_x that have impeded progress in reducing emissions and improving visibility in the Class I areas within Virginia or impacted by Virginia sources. The Commonwealth provided data demonstrating present emission reductions of SO₂ from EGUs were greater than originally projected for 2018 in the State's regional haze SIP and showing an overall significant downward trend in emissions over the period 2002 to 2011. Furthermore, the progress report SIP shows that the Commonwealth is on track to meeting its 2018 RPGs for James River and Shenandoah.

The provisions under 40 CFR 51.308(g)(6) require an assessment of whether the current regional haze SIP is sufficient to enable the state, or other states, to meet the RPGs for Class I areas affected by emissions from the state. In its progress report SIP, Virginia states that it believes that the elements and strategies outlined in its original regional haze SIP are sufficient to enable Virginia and other neighboring states to meet all the established RPGs. To support this conclusion, the Commonwealth of Virginia notes that Virginia's actual 2012 EGU emissions of

SO₂ are already below the 2018 projected emissions of SO₂, with further decreases expected. Virginia expects that the reduction of SO₂ emissions will in fact be even greater than originally anticipated, particularly for the EGU sector as previously discussed in this rulemaking notice. In particular, the Commonwealth notes the emissions reductions already achieved between 2007 and 2012 and the additional reductions projected for 2018 which were not included in the original regional haze SIP (as discussed previously for purposes of 40 CFR 51.308(g)(1)) further support the Commonwealth's conclusion that the regional haze SIP's elements and strategies are sufficient to meet the established RPGs. Virginia also provides information on all the Class I areas where any Virginia point source was found to have contributed to the calculated sulfate visibility impairment in 2018 and shows each Class I area has made significant progress toward improving visibility. Virginia's progress report SIP contains visibility data supporting the conclusion that each Class I area impacted by sources in Virginia is meeting or below its "glidepath," making reasonable progress towards achieving natural visibility conditions.

EPA proposes to conclude that Virginia has adequately addressed under the requirements of 40 CFR 51.308(g)(6). EPA views this requirement as a qualitative assessment that should evaluate emissions and visibility trends and other readily available information, including expected emissions reductions associated with measures with compliance dates that have not yet become effective. The Commonwealth referenced the improving visibility trends with appropriately supported data and referenced the downward emissions trends in the Commonwealth, with a focus on SO₂ emissions from Virginia EGUs, that support the Commonwealth's determination that the Commonwealth's regional haze SIP is sufficient to meet RPGs for Class I areas within

and outside the Commonwealth impacted by Virginia sources.

The provisions under 40 CFR 51.308(g)(7) require a review of a state's visibility monitoring strategy and an assessment of whether any modifications to the monitoring strategy are necessary. In its progress report SIP, Virginia summarizes the existing monitoring network at James River and Shenandoah and discusses its intended continued reliance on the IMPROVE monitoring network for its visibility planning. Virginia also expresses its continued commitment to operate monitors supporting regional haze investigations where appropriate and when support is available. Virginia also encourages VISTAS and other regional planning organizations to maintain support of the existing data management system or an equivalent to facilitate availability analysis of IMPROVE and visibility-related data. Virginia concludes that the existing network is adequate and that no modifications to the Commonwealth's visibility monitoring strategy are necessary at this time.

EPA proposes to conclude that Virginia has adequately addressed the sufficiency of its monitoring strategy as required by the provisions under 40 CFR 51.308(g)(7). The Commonwealth reaffirmed its continued reliance upon the IMPROVE monitoring network and discussed its additional PM_{2.5} monitoring network used to further understand visibility trends in the Commonwealth. Virginia also explained the importance of the IMPROVE monitoring

network for tracking visibility trends at James River and Shenandoah and identified no expected changes in this network.

B. Determination of Adequacy of Existing Regional Haze Plan

Under 40 CFR 51.308(h), states are required to take one of four possible actions based on the information gathered and conclusions made in the progress report SIP. The following section summarizes: the action taken by Virginia under 40 CFR 51.308(h); Virginia's rationale for the selected action; and EPA's analysis and proposed determination regarding the Commonwealth's action.

In its progress report SIP, Virginia submitted a negative declaration that it had determined that the existing regional haze SIP requires no further substantive revision to achieve the RPGs for Class I areas affected by Virginia's sources. The basis for the Commonwealth's negative declaration is the findings from the progress report (as discussed in section III of this rulemaking action), including the findings that: Visibility data has improved at James River and Shenandoah; SO₂ emissions from the Commonwealth's sources have decreased beyond original projections; additional EGU control measures not relied upon in the Commonwealth's regional haze SIP have been implemented or will occur in the implementation period; and the EGU SO₂ emissions in Virginia are already below the levels projected for 2018 in the regional haze SIP and are expected to continue to trend downward for the next five years, as will the SO₂ emissions from EGUs in the other VISTAS states. EPA proposes to conclude Virginia has adequately addressed under the requirements of 40 CFR 51.308(h) because the visibility data trends at the

Class I areas impacted by the Commonwealth's sources and the emissions trends of the Commonwealth's largest emitters of visibility-impairing pollutants both indicate that the Commonwealth's RPGs for 2018 will be met or exceeded.

IV. General Information Pertaining to SIP Submittals from the Commonwealth of Virginia

In 1995, Virginia adopted legislation that provides, subject to certain conditions, for an environmental assessment (audit) "privilege" for voluntary compliance evaluations performed by a regulated entity. The legislation further addresses the relative burden of proof for parties either asserting the privilege or seeking disclosure of documents for which the privilege is claimed.

Virginia's legislation also provides, subject to certain conditions, for a penalty waiver for violations of environmental laws when a regulated entity discovers such violations pursuant to a voluntary compliance evaluation and voluntarily discloses such violations to the Commonwealth and takes prompt and appropriate measures to remedy the violations. Virginia's Voluntary Environmental Assessment Privilege Law, Va. Code Sec. 10.1-1198, provides a privilege that protects from disclosure documents and information about the content of those documents that are the product of a voluntary environmental assessment. The Privilege Law does not extend to documents or information that: (1) Are generated or developed before the commencement of a voluntary environmental assessment; (2) are prepared independently of the assessment process; (3) demonstrate a clear, imminent and substantial danger to the public health or environment; or

(4) are required by law.

On January 12, 1998, the Commonwealth of Virginia Office of the Attorney General provided a legal opinion that states that the Privilege law, Va. Code Sec. 10.1-1198, precludes granting a privilege to documents and information “required by law,” including documents and information “required by Federal law to maintain program delegation, authorization or approval,” since Virginia must “enforce Federally authorized environmental programs in a manner that is no less stringent than their Federal counterparts. . . .” The opinion concludes that “[r]egarding § 10.1-1198, therefore, documents or other information needed for civil or criminal enforcement under one of these programs could not be privileged because such documents and information are essential to pursuing enforcement in a manner required by Federal law to maintain program delegation, authorization or approval.”

Virginia’s Immunity law, Va. Code Sec. 10.1-1199, provides that “[t]o the extent consistent with requirements imposed by Federal law,” any person making a voluntary disclosure of information to a state agency regarding a violation of an environmental statute, regulation, permit, or administrative order is granted immunity from administrative or civil penalty. The Attorney General’s January 12, 1998 opinion states that the quoted language renders this statute inapplicable to enforcement of any Federally authorized programs, since “no immunity could be afforded from administrative, civil, or criminal penalties because granting such immunity would not be consistent with Federal law, which is one of the criteria for immunity.”

Therefore, EPA has determined that Virginia's Privilege and Immunity statutes will not preclude the Commonwealth from enforcing its program consistent with the Federal requirements. In any event, because EPA has also determined that a state audit privilege and immunity law can affect only state enforcement and cannot have any impact on Federal enforcement authorities, EPA may at any time invoke its authority under the CAA, including, for example, sections 113, 167, 205, 211 or 213, to enforce the requirements or prohibitions of the state plan, independently of any state enforcement effort. In addition, citizen enforcement under section 304 of the CAA is likewise unaffected by this, or any, state audit privilege or immunity law.

V. EPA's Proposed Action

EPA is proposing to approve Virginia's regional haze five-year progress report SIP revision, submitted by the Commonwealth of Virginia on November 8, 2013, as meeting the applicable regional haze requirements set forth in 40 CFR 51.308(g) and 51.308(h).

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those

imposed by state law. For that reason, this proposed action:

- is not a “significant regulatory action” subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule to approve Virginia's regional haze progress report SIP revision does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

AUTHORITY: 42 U.S.C. 7401 *et seq.*

Dated: February 11, 2014.

W. C. Early,
Acting Regional Administrator,
Region III.

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